

DESCRIPTION

HIGH FREQUENCY MODULE AND ANTENNA APPARATUS

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TECHNICAL FIELD

The present invention relates to a high frequency module that is used mainly in VHF, UHF, microwave and millimeter wave bands, and more particularly to an antenna apparatus using the same.

BACKGROUND ART

Fig. 19 shows an arrangement of an antenna apparatus for shared use of left/right-handed circularly polarized waves and two frequency bands set forth, for example, in Takashi Kitsuregawa, "Advanced Technology in Satellite Communication Antennas: Electrical & Mechanical Design", ARTECH HOUSE INC., pp. 193-195, 1990.

In the figure, reference numeral 61 denotes a primary radiator for transmitting both left- and right-handed circularly polarized waves in a first frequency band to a main- or sub-reflector and for receiving both left- and right-handed circularly polarized waves in a second frequency band from the main- or sub-reflector; 62, a polarizer; 63, an orthomode transducer; 64a and 64b, diplexers; P1, an input terminal for radio waves in the first frequency band transmitted from the primary radiator 61 in a left-handed circular